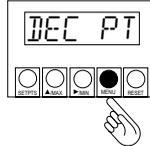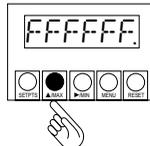# 5

Set Default Decimal Point
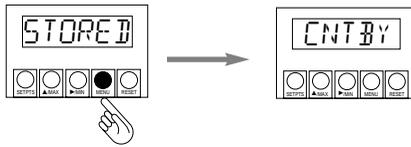
1. Press MENU. The meter displays:

`DEC PT`

2. Press ▶/MIN to display the current decimal point. Change the display, if necessary, to read "FFFFFF." (Use ▲/MAX to change the decimal point position).

`FFFFFF.`

3. Press MENU. The meter stores changes (if applicable), then displays "CNT BY".

`STORED` → `CNT BY`

4. Press RESET twice. The meter momentarily displays "RESET 2" then returns to the run mode. The meter will now read the input signal (4mA = ≈ 000000. and 20mA = ≈ 020000.).
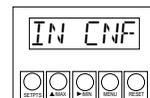
Measure and Record Input Values

1. Apply 4mA to the input and record the display reading.
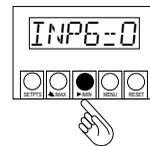   INPUT 1 = _____
   Refer to this as Input One.
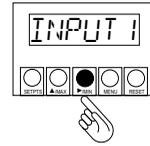
`INPUT 1`

2. Apply 20mA to the input and record the display reading.
   INPUT 2 = _____
   Refer to this as Input Two.

`INPUT2`
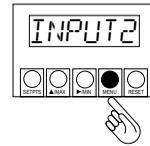
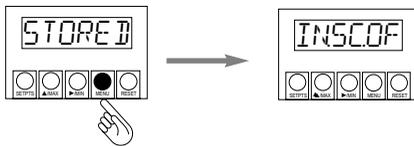3. Press MENU until the meter displays:
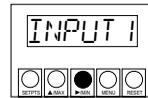
`IN CNF`

4. Press MENU until the meter displays:

Press ▶/MIN to display "INP6=0" Change the meter to read "INP.6=1" (Use ▶/MIN to scroll through digits and ▲/MAX to change the digit's value).

`INP6=0`

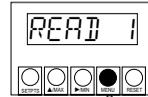5. Press MENU. The meter stores changes and displays:

`STORED` → `INSCOF`

6

Scale Input Values

1. Press ▶/MIN to display "INPUT 1":
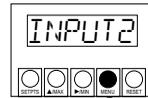
`INPUT 1`

Press ▶/MIN again. The meter displays "000000". Enter the INPUT 1 value recorded in step 1 of the Measure Input Values section of this quick start.

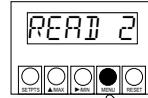2. Press MENU. The meter displays "READ 1":

`READ 1`

Press ▶/MIN to display a six-digit number. Change the meter to read "000000". (Use ▶/MIN to scroll through digits and ▲/MAX to change the digit's value.)

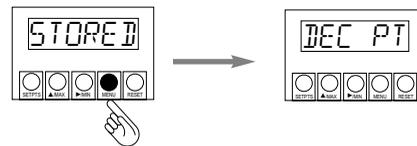3. Press MENU. The meter displays "INPUT 2":

`INPUT2`

Press ▶/MIN. The meter displays "000000". Enter the INPUT 2 value recorded in step 2 of the Measure Input Values section of this quick start.

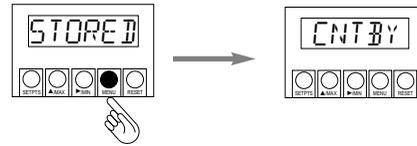4. Press MENU. The meter displays "READ 2":

`READ 2`

Press ▶/MIN to display a six digit number. Change the meter to read "001000". (Use ▶/MIN to scroll through digits and ▲/MAX to change the digit's value.)

5. Press MENU. The meter stores changes and displays:

`STORED` → `DEC PT`

6. Press ▶/MIN to display the current decimal point. Press ▲/MAX to change the decimal point location to "FFFFF.F".

7. Press MENU. The meter stores this change, then displays "CNT BY"

`STORED` → `CNT BY`

8. Press RESET twice. The meter displays: "RESET 2", then returns to the run mode. The meter is now scaled to read 0 to 100.0 for a 4-20 mA input.

`RESET2`
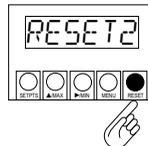
WARNING: These products are not designed for use in, and should not be used for, patient connected applications.

⚠ This device is marked with the international caution symbol. It is important to read the Setup Guide before installing or commissioning this device as it contains important information relating to safety and EMC.

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

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12450ML-99 Rev.F   MQS1297/0202

QUICK START

CE MADE IN USA

DP41-E
High Performance Process Indicator

`432865` (display)

SETPTS ▲/MAX ▶/MIN MENU RESET

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Using This Quick Start Manual

Use this Quick Start Manual to get your High Performance Process Indicator up and running. These instructions use the factory default settings of current input and 24 Vdc sensor excitation. To start your unit you:
• connect ac power
• wire the sensor
• configure the meter, using the front panel buttons and the configuration menus

Before You Begin

Check the serial label on the top of the meter case. The model number's last 3 digits indicate if the meter is set up for voltage or current. C1 - C2 are current ranges and DC1 - DC10 are voltage ranges. **This quick start manual uses the C2 (4 - 20mA) range**. If your meter is setup for a range other than C2, consult the reference manual.

Your unit should have the following parts:

• Meter

• Front panel button cover

• Panel mounting gaskets

• ac Power Connector (orange -P1), Input Connectors (2) (grey -P3 and P9), and rear protective cover (mounted).

Contact the nearest Customer Service Department using the numbers listed on the front of this quickstart manual if any of these parts are missing, or if you have questions . In addition to the unit and related parts, you will need the following items to set up your unit:
• ac power, as listed on meter's Product/ID
• 4-20mA input (eg: load cell, calibrator)
• 1/8" Phillips head screwdriver
• 1/8" flat blade screwdriver

Connect ac Power

1. Remove the rear protective cover and set it aside. The cover is secured with a Phillips-head screw.
2. Locate connector P1 on the bottom-left-rear of the unit. The connector has three screw-down terminals.
3. Insert the correct wire in each terminal and tighten the lockdown screw. Tug gently on each wire to verify the connection.

~AC Line
~AC Neutral
EARTH GROUND
P1
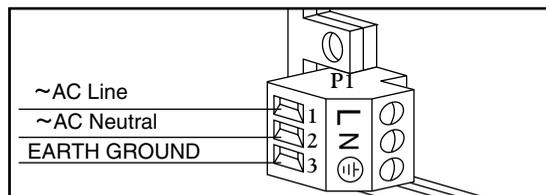
P1 Connector
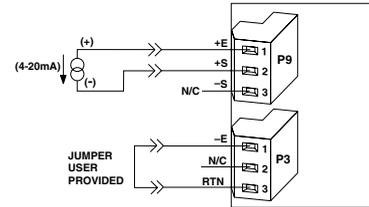
Wiring a Current Transmitter

Follow these steps to wire a current input sensor with sensor excitation.
1. Locate connectors P3 & P9 on the right-side-rear of the unit.
2. Attach the wires and tighten the retaining screws. Tug gently on the wires to verify the connection.

Wiring Example: Current Input with Sensor Excitation

(4-20mA)
(+)
(+)
+E
+S
−S
N/C
P9
−E
N/C
RTN
P3
JUMPER USER PROVIDED

3. Apply ac power. The front panel of the unit flashes RESET2.

   If it does not:
   a. Remove ac power.
   b. Verify the P1 power and P3 and P9 input connections.
   c. Check your power source.
   d. Check your signal source.

4. Replace the rear cover. Thread the sensor wires through the slots on the side of the cover. Replace the rear cover screw.

5. Apply ac power once again.

Configure the Meter

Use the front panel buttons to access the configuration menus, to either verify or set the unit values. The function of each button is described below:

Meter Button Descriptions

| Press This Button To:	
SETPTS	sequentaily recall previous setpoint settings (run mode only), store new setpoint values.
MENU	access the configuration program menus and move from one menu to the next.
▶/MIN	enter and scroll through a submenu.
▲/MAX	change the value of a submenu.
RESET	move backward one menu (press once) or exit the configuration menus (press twice).

Quick Start Setup

Quick Start Setup scales your meter to read 0 to 100.0 for a 4 - 20mA input. This setup procedure is actually a series of short tasks. To complete Quick Start Setup successfully, it is important to perform all tasks in the order outlined in the Quick Start Setup.

Select Input Range

1. Press MENU until the meter displays: `INPUT`

2. Press ▶/MIN until the meter flashes: `CURRNT`
   Press MENU and "CURRNT" stops flashing.
   Press ▶/MIN to display a flashing input range of 4-20mA or 0-20 mA. Press ▲/MAX until the meter displays "4-20mA."

3. Press MENU. The meter stores changes (if applicable), then displays "RDG.CNF": `STORED` → `RDGCNF`
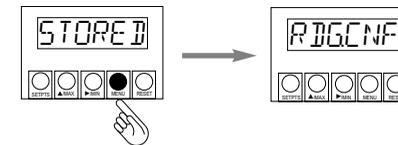
Set Up Reading Configuration

1. Press ▶/MIN to display "RDG.1". Press ▲/MAX until the meter displays "RDG.1=0". Selecting "RDG.1=0" enables direct formatting. `RDG 1=0`

2. Press ▶/MIN to display "RDG.2". Press ▲/MAX until the meter displays "RDG.2=1". Selecting "RDG.2=1" enables an active decimal point. `RDG2=1`

3. Press MENU. The meter stores changes (if applicable), then displays "RDG SC": `STORED` → `RDG SC`
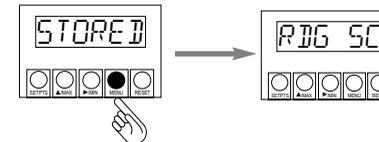
Set Reading Scale Factor and Reading Offset

1. Press ▶/MIN to display the scale factor value. Change the value, if necessary, to read "1.00000" (Use ▶/MIN to scroll through digits and ▲/MAX to change the digit's value). `100000`

2. Press MENU. The meter stores changes (if applicable) then displays "RDG.OF": `STORED` → `RDGOF`

3. Press ▶/MIN to display the offset value. Change the value, if necessary, to read "000000" (Use ▶/MIN to scroll through digits and ▲/MAX to change the digit's value). `000000`

4. Press MENU. The meter stores change, if applicable, then displays "IN CNF". `STORED` → `CNTBY`
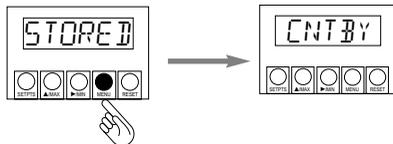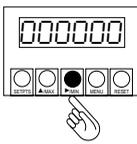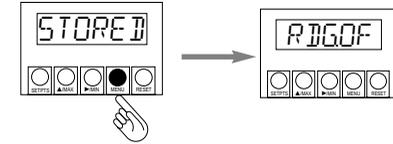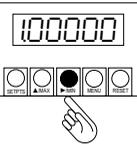
Set Default Input Scale and Offset

1. Press ▶/MIN until the meter flashes. Change the value, if necessary, to read "INP.6=0" (Use ▶/MIN to scroll through INP submenu choices and ▲/MAX to select 0 as the value). Setting "INP.6=0" disables input scale and offset. `INP.6=0`

2. Press MENU. The meter stores changes, if applicable, then displays "IN.SC.OF". `STORED` → `INSCOF`